DOCUMENT RESUME

ED 197 076 CE 027 582

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TITLE	Evaluation of Coordinated Cooperative Education Programs in Clearfield, Fulton, Schuylkill Counties (2nd Year). Final Report.
INSTITUTION	Pennsylvania State Univ., University Park. Div. of Occupational and Vocational Studies.
SPONS AGENCY	Pennsylvania State Dept. of Education, Harrisburg. Bureau of Research and Evaluation.
PUB DATE	Sep 80
NOTE	49p.
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*Cooperative Education; *Coordination; Counselor Attitudes; County Programs; *Dropout Rate; Employer Attitudes; Graduate Surveys; High Schools; *Program Effectiveness; Questionnaires; Student Attitudes; Surveys; Unemployment; *Vocational Education; *Youth Employment
IDENTIFIERS	Pennsylvania (Clearfield County); Pennsylvania (Fulton County); Pennsylvania (Schuylkill County)

ABSTRACT

Three county-wide coordinated cooporative programs in Pennsylvania were evaluated to determine their impact upon high youth unemployment and dropout rates, to obtain student and employer attitudes toward the program, and to ascertain bow well they meet their objectives. Current students (335), graduates (193), guidance counselors (25), and employers (4 to 5 from each county involved) were surveyed by personal interview or questionnaire. In addition, on-site visits to employment sites were made and meetings of county-wide coordinators and state research coordinating units were held to further evaluate each program. Data from all four groups surveyed indicated that the programs were operating effectively and efficiently. The graduates and current students surveyed felt that the program had a definite effect on lowering dropout and unemployment rates. Employers called for a more coordinated effort. Recommendations included expanding the county-wide concept, further follow-up in the area of sex equity, expanding the cooperative vocational education approach to include more students in diversified occupations, expanding ways to maximize the job development process, and conducting further research on the effects of CETA and targeted tax credit legislation on cooperative education student placement. (MN)

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CE 84-193
1/23/81
PA 80 13a 01

FINAL REPORT

EVALUATION OF COORDINATED COOPERATIVE EDUCATION PROGRAMS IN CLEARFIELD, FULTON, SCHUYLKILL COUNTIES (2nd Year)

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September, 1980

Pennsylvania Department of Research
Bureau of Research and Evaluation
Research Coordinating Unit for Vocational Education

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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ACKNOWLEDGEMENTS

Special appreciation is given to students, employers, graduates, and guidance counselors from Fulton, Schuylkill, and Clearfield counties. Special thanks is extended to Bill Krash, Paul Hendershot, and Russ Triponey for their cooperation during this evaluation. Special appreciation is also given to Tak Pong, Donald Pittenger, Jeannine Fan Subisak for their efforts in the data collection for Phase I of this project. Tak Pong is also to be thanked for his efforts in the data collection and computer analysis of Phase II, and Ron Fang for his assistance in the development of the final report.

ABSTRACT

EVALUATION OF COORDINATED COOPERATIVE EDUCATION PROGRAMS, IN CLEARFIELD, FULTON, AND SCHUYLKILL COUNTIES (SECOND YEAR IN OPERATION)

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$4976.00 Federal
0.00 Non-Federal
7/1/79 to 6/30/80

Overall Objective

To evaluate the second year of the county-wide coordinated cooperative education programs funded by the Research Coordinating Unit in Clearfield, Fulton, and Schuylkill counties.

Sub-Objectives

1. To determine the effect the coordinated cooperative education project had upon high youth unemployment and school dropout rates.
2. Sample students' attitudes toward the second year of the cooperative education program concerning placement, on-the-job supervision, theory class, extra-curricular activities, etc.
3. Sample employers' reactions toward the consolidated efforts to determine its effectiveness in alleviating duplication and encouraging participation by employers in the cooperative education program.
4. To determine how well the individually funded projects are meeting their stated objectives.

Outcome

The projects were meeting the stated objectives, although one county's chief administrator was not enthusiastic about the county-wide concepts as the other two. The employers indicated a willingness to continue training the students and felt that coordinated efforts of the program had made their job easier. They appreciated having to contact only one individual instead of several from each school district and program areas. It was the general consensus of the guidance counselor's surveyed that the co-op program had

improved over the past year and they were enthusiastic toward the consolidated co-op approach. Students enrolled in the 1979-80 school year felt their program to be valuable and stated that the employers were visiting them approximately twice each month. Unfortunately, there was little time for extra-curricular activities.

The graduates were employed in the areas in which they trained, and approximately 50 percent were working for the employer who trained them. The coordinated approach had a positive effect from employers, guidance counselors, students and graduates point of view. Generally, the program was working as designed and the stated objectives were being met. Audiences, CVE programs, and staff were interested in consolidating their cooperative education programs in their geographic areas as well as administrators who were interested in establishing new cooperative vocational education programs.

Introduction

Cooperative vocational education (CVE), as a concept, has been utilized in the United States since its beginning when Herman Schneider, Dean of the College of Engineering at the University of Cincinnati, developed in 1906 this concept to insure that graduating engineers would have practical application, as well as theory, before full-time employment commenced. The growth of CVE, at both the secondary and postsecondary level was slow, but steady, until the 1960's when special categorical funding caused major expansion, particularly at the secondary level. Funding priorities were given to those communities with high youth unemployment and/or extreme dropout rates. Recent legislation, at the secondary level, has eliminated categorical funding yet the CVE program continues to grow. The definition of CVE has

remained the same since the late 60's; simply translated it defines CVE as a program or method which utilizes the work environment as a part of the educational process. The work environment activities and the school activities are planned so both contribute toward the student's employability.

There are two basic types of CVE. The first having some prior inschool vocational preparation before the industrial environment. This is called capstone. An example of this would be a secondary machine shop student working in industry, during his/her senior year, during that part of the school day they normally would be in the shop program. The second approach is diversified occupations (DO), where there is no prior inschool preparation before work release. The lack of inschool preparation may be due, in part, to the inaccessibility of courses or in areas where there is little demand. In the DO approach, all vocational training takes place on the job. Both approaches utilize the job site to develop or expand vocational education. In the capstone program, the learning is placed on new equipment or processes that are not available in the school. Diversified occupations basic occupational training for job entry level is provided. Both programs coordinate the inschool educational activity with on-the-job learning so both will increase the student's employment opportunities.

In Pennsylvania the cooperative vocational education concept has grown from a few dozen programs in 1970 to in excess of 600 at the end of the 1980 school year. This rapid expansion has at the present time over 22,000 students enrolled in this concept. These students will be attending the school facility for only one-half of the school day and working under a supervised training arrangement for the remaining portion of the school day. This has had a major effect on the number of teachers needed to teach both general education and inschool vocational subjects, as well as those needed to

coordinate this program. Research conducted by local school districts suggests that the job placement record following graduation are 50 percent better in areas of training following a cooperative education experience than those vocational students not involved in cooperative education. Yet many vocational educators see the cooperative education concept as a second best approach and claim that better and more thorough training takes place in the school setting.

Statement of the Problem

The problem this study attempted to answer was "Is the county-wide co-op concept being effectively managed in Clearfield, Fulton, and Schuylkill counties?" Another question being asked is "Are these counties meeting their stated objectives?"

A major concern of this study was to determine what effect the present programs have on youth unemployment and school dropout rates. Another major concern was the cost and effectiveness of the cooperative vocational education concept to employers, schools, students and their parents. This study also was concerned about the placement records, employment status, salary, and program satisfaction of students one year following graduation. In general, this study attempted to determine the overall effect of utilizing industry as a part of, or all, vocational training of secondary students.

Objectives

1. To determine the effect the coordinated cooperative education project had upon high youth unemployment and school dropout rates.
2. Sample students' attitudes toward the second year of the cooperative education program concerning placement, on-the-job supervision, theory class, extra-curricular activities, etc.
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4. To determine how well the individually funded projects are meeting their stated objectives.

Related Literature

Cost benefit studies attempt to determine if the benefits derived from the program outweigh the cost. The answer to this task is not an easy one. Lewis et al (1976) in attempting to answer the question, "Does the CVE benefits justify the costs?" stated:

> It could be stated at the very beginning that the answer to this question cannot be a simple "Yes" or "No." The results that were obtained cover a variety of outcomes that could be influenced by work experience and they are not all clearly positive or negative. (p. 1)

One of the reasons is that the dollar and cents are not the only cost or benefits of such a program. Drawbough (1977) stated:

> It is not technology or capital but an adequate supply of competent employees that is the decisive factor in production and marketing in the established corporation. (p. 29)

As to the dollar and cents cost of a program, Moore (1976) in a study of 10,000 students in Southern California's cooperative program found that the average cost per student was $50 or less which he concluded was a very minimal cost for the benefits received. Lewis et al. in their national study concluded that it cost an additional $125 per year, per student, for the cooperative education experience, thus making this a rather expensive concept. Why the extra costs? Lewis et al. (1976) stated:

> The answer appears to lie in the extra cost for school supervision and job placement--primarily the cost of the coordinator's salary and travel--and the fact that the other major inschool cost--teacher salaries--is the same whether the student is on the job or in the shop. (p. 4)

Evans (1971) looked at costs a little differently. He found that cooperative work experience education (CWE) had a higher rate of return for the expenditures. Capital costs for the school were lower, and the students were receiving a wage for their training, thus the student costs were lower. He stated:

> Highly specialized equipment which may quickly become obsolete cannot be afforded in a typical school vocational program, but will be provided on the job because of production demands. (p. 197)

Lewis et al. (1976) suggested that additional costs of students was that of time. They found that students had less time to be involved in extra-curricular activities, if involved in a cooperative vocational education experience.

As to benefits derived from the program it was the same as costs. Benefits cannot always be judged in terms of dollars and cents. Middleton (1975) in evaluating cooperative vocational education programs in Vancouver British Columbia Secondary School Systems found that not only did the programs create job skills within the students but it helped students become self-directed, confident, and mature adults. Frankel (1973) found that the cooperative vocational education program appeared to be generating more enthusiasm among students, employers, and school officials because they were meeting the expressed needs and objectives of all three groups. Lewis et al. (1976), in comparing cooperative vocational education students with non-cooperative education students stated:

> . . .that students in school-supervised jobs, either cooperative or work study, (but especially cooperative) have benefited more in terms of career development and planning, satisfaction in school, and dropout prevention, than other students.

He further stated:

> Participation in cooperative programs does seem to enhance the student's "employability" and to ease the transition from school to work; work study programs do seem to deter potential dropouts. (p. 10)

In terms of dollars and cents, Slick-Welch (1974), in a study of vocational students two years after graduation found that:

> The graduates of the capstone program reported weekly earnings of $139, with the diversified occupations program graduates earning $136, and the total inschool program graduates, $117. (p. 49)

Thus the cooperative vocational education students tend to earn more money than their counterparts who do not have cooperative education experience. The Slick-Welch study also followed up the employers of the graduates to determine their feelings toward the training their students had received. They stated:

> The findings of this study indicate that the graduates of cooperative vocational programs have a better preparation for the world of work than those having only the inschool vocational training. This is verified by the opinion of the graduates, the opinion of the employers, and the salary paid to respective program graduates. (p. 40)

Welch (1977), in the review of the related literature on the cost-effectiveness study summarized his findings.

> It is obvious that there are many benefits to students other than monetary benefits--such as a wise career choice, job satisfaction, school satisfaction, as well as a positive adjustment to the world of work. Employers benefit heavily in the area of recruiting future employees as well as becoming an integral part of the school system and receiving some direct returns for their tax dollar.

The literature suggests that there is wide variation in terms of costs and benefits in a cooperative vocational education program. Many of the programs that looked at the dollar and cent costs of a cooperative vocational education program did not examine what the alternatives were to cooperative education and what the costs of these alternatives were. Generally the findings of the studies were supportive to the cooperative vocational education approach.

Procedure and Methodology

To meet the overall objective the following groups were surveyed, by questionnaire or personal interview, for the purpose of evaluating the three county-wide cooperative vocational education programs. The following groups assisted with the study, namely: guidance counselors from each of the three counties, students currently enrolled in cooperative vocational education programs during the 1979-80 school year and four to five employers from each of the three county-wide areas. This effort was met by coordinating three meetings with county-wide co-op coordinators, state research coordinating units, cooperative education staff and The Pennsylvania State University research staff for the purpose of outlining procedures, collecting data on graduates and current enrollments as well as discussing procedural processes in each of the groups meeting their stated objectives. Two meetings were held on the Penn State campus at the Nittany Lion Inn; one on November 1, 1979 and the other on January 24, 1980. The third visit was an on-site visit. The Pennsylvania research group, selective state staff from the Research Coordinating Unit and the cooperative vocational education staff contacted a minimum of four employers from each of the three county areas. Their main thrust of the on-site visit with employers was to determine what effect a consolidated effort had upon placement and employer's willingness to participate in a cooperative vocational education experience. The files and resources for the cooperative vocational education staff were also checked to determine if they were meeting the stated objectives of cooperative vocational education.

FINDINGS

Introduction

Four groups were selected to be surveyed to determine the effectiveness of the coordinated cooperative vocational education approach and also to see that each program met its stated objective as well as the objectives for cooperative vocational education. The four groups selected were: graduates of cooperative vocational education programs; students currently enrolled in a cooperative vocational education program; guidance counselors from the home school, as well as those in an area vocational-technical school who come in contact with the cooperative vocational education students and, employers who employ students from a cooperative vocational education program. The purpose of the overall objective was to determine if the coordinated program had a positive effect on non-coordinated programs as well as to see if there had been any effect on youth unemployment or school dropout rates due to involvement in a cooperative vocational education program.

Graduates

As previously stated, 50 percent or 193 usuable responses were returned from the questionnaire (see Appendices). The students were asked if they were enrolled in a capstone cooperative vocational education program or a diversified occupational program. A number of students did not choose to mark either, perhaps due to misunderstanding the question. They were categorized under "Other" for reporting. It is interesting because the category called "Other," in many cases, did not respond in the same manner as the diversified occupation and capstone students. Male and female respondents were also identified in several instances because their reaction to the questions were quite different suggesting perhaps they did not receive or were not treated in an equitable fashion.

POPULATION

Graduates

There were 387 graduates in the three programs. Questionnaires were sent to those students who graduated 10 months earlier. Fifty percent or 193 usable responses were collected.

Guidance Counselors

A total of 25 guidance counselors were identified by contacting the cooperative vocational education students in the three county area (see Table III). One hundred percent returns were received due to personal contact by the staff at The Pennsylvania State University and the cooperative vocational education staff in the respective counties.

Current 1979-80 Students

There are 335 students currently enrolled in the three county area programs. Due to Schuylkill's semester approach, only those presently enrolled in the cooperative vocational education program were contacted. The data was collected in a related theory class thus allowing the research staff to collect 100 percent returns.

Employers

Five employers were selected from each of the three counties for an on-site visitation by the PSU research team. One employer in two of the counties was not contacted, thus only 13 on-site visits were reported in the findings. Information was provided for the two employers that were absent, which was consistant with the findings of the employers contacted. Since this was to be an employer survey these findings were not included.

Co-op Graduate Follow-up

1. Do (did) you work in the area related to the training you received while enrolled in the cooperative educational program? Yes_____ No _____

   As Table indicates a high percentage are holding jobs in the area in which they trained and 77 percent of those working reported they were working in the area for which they had trained. (See Table 1).

2. Do you work for the same employer as when you were enrolled in the cooperative education program? Yes _____ No _____

   More males than females tended to work for the employers for which they trained. A total of 47 percent were working for the same employer they had trained for 10 months previously.

3. Are you satisfied with your position? Yes_____ No _____

   As Table 1 indicates, more capstone females and more diversified occupational males were satisfied with their present position. Most were generally satisfied with their position. In fact, a total of 66 percent were satisfied with their present positions and 26 percent were unsatisfied. Also, note that in Table 3, the response rate of questions 1 and 3 were identical, suggesting that if they worked in an area for which they trained, they were satisfied with their present positions. If not, they would tend to be dissatisfied.

4. If you were to repeat high school, would you choose the cooperative education program? Yes _____ No _____

   Again, the majority of people who graduated from the cooperative vocational education program would enroll again if they were beginning high school for the second time. Again, note in Table 3, the consistency between those working in the area in which they trained and the satisfaction they received in their training and they would repeat this activity, if necessary.

TABLE I

1980 Coop Graduate Follow-Up

Question No.	Items	CAP *				DO **				OTHER ***				ALL GRADUATES	
		Female		Male		Female		Male		Female		Male			
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
1.	Working experience in the area related to the training received	93%	7%	73%	23%	77%	23%	81%	19%	71%	29%	75%	23%	76%	23%
2.	Do you work for the same employer as when you were enrolled in the co-op program?	47%	47%	64%	36%	31%	69%	50%	50%	45%	53%	44%	53%	47%	51%
3.	Are you satisfied with your position?	67%	20%	68%	27%	85%	15%	62%	19%	53%	39%	70%	26%	66%	27%
4.	If you were to repeat high school, would you choose the cooperative education program	73%	27%	91%	9%	100%	0%	96%	4%	89%	11%	95%	4%	92%	7%
5.	Did co-op program help improve ability to get along with your co-workers, customers, or other people?	93%	7%	86%	14%	100%	0%	100%	0%	97%	3%	92%	7%	94%	5%
6.	Did your school assist you in finding a position after graduation?	33%	67%	23%	73%	38%	62%	19%	77%	16%	79%	22%	74%	23%	74%
11.	Would you recommend that your best friend or relative enroll in a co-op program?	60%	27%	91%	9%	100%	0%	100%	0%	95%	5%	94%	5%	92%	6%
12.	The co-op program help the student financially to remain in school and graduate?	40%	53%	68%	27%	46%	54%	42%	58%	47%	53%	48%	47%	49%	48%
13.	I would have dropped out of school if a co-op program were not available.	0%	100%	5%	95%	8%	92%	8%	92%	11%	89%	14%	84%	10%	90%
14.	Have you ever sought help in obtaining a position from the state employment office?	27%	73%	41%	59%	15%	85%	19%	81%	21%	79%	30%	69%	27%	73%

*Capstone
** Diversified Occupations
*** Others (Those not checking Diversified Occupations or Capstone)

5. Did the cooperative education program help improve your ability to get along with your co-workers, customers, and/or other people? Yes _____ No _____

There is little doubt that the cooperative vocational education approach helps students learn to deal with people. It is one of the fortes of cooperative vocational education and is substantiated by graduates of the three counties. These students had no previous vocational training, therefore this was the first educational experience they encountered in dealing with others outside the classroom.

6. Did your school assist you in finding a position after graduation? Yes _____ No _____

Results obtained suggest the students either did not understand the question or didn't realize the effect a co-op coordinator had in assisting them in finding employment. It is amazing that only a third felt that the school helped in finding employment for these students.

7. When comparing your age and background with others, do you consider your salary as: above average _____, average _____, lower than average _____

Here the researchers attempted to determine the perception of graduates in terms of their peers. Human subject review committees would not permit direct questioning concerning the amount of money made. The perception perhaps has more value than the actual dollar amount earned. Results of this question were very interesting. The difference between the cooperative vocational education capstone and d.o. programs was quickly determined. It will be noted that the female population tended to lower the average response to this question. Capstone females felt their earnings were above average and d.o. females felt their earnings were below the average wage received by males in any other category. An interesting finding was that capstone females responding to this question indicated they were earning average or more, none felt they were earning below average wages. Twenty-five percent of the students felt they were making

more than average, and 58 percent felt they were making average wages. Eleven percent felt they were making below average, again the females tended to lower the entire average of the group surveyed. This question leads to others relating to jobs and sex equity. (See Table II)

8. How many weeks after graduation from high school did you obtain your first full-time position? 0-2 weeks _____, 3-5 weeks _____, 6-8 weeks _____, 9-11 weeks _____, over 12 weeks _____, never looked for a position _____.

If vocational education is to do its job, it must help people find employment in areas for which they were trained, and should provide this employment opportunity as quickly after graduation as possible. The cooperative education approach tends to serve as the transition between school and work. Results of this survey strongly suggest that for the most part, that the transition is rather smooth (see Table 2). Sixty-four percent of students employed acquired their first job within two weeks of graduation.

9. How many full-time positions have you had since graduating from high school? 1 _____, 2 _____, 3_____, 4 _____, more than 4 _____

Again, the availability of employment is another factor involved in the success rate of any cooperative or vocational education program (see Table 2). The majority of students held one job in a 10 month period following graduation and only a few had more than two jobs during this time period; one individual held four different jobs. This problem may not be attributable to vocational education.

10. How satisfied are you with your high school academic program? very satisfied _____, satisfied _____, not satisfied _____, very dissatisfied _____.
How satisfied are you with your vocational program?
very satisfied _____, satisfied _____, not satisfied _____, very dissatisfied _____

In Table 4 you will note that the graduates were generally more satisfied with the cooperative vocational education program than they were with the academic part of the program. Those dissatisfied with cooperative education tended to be dissatisfied with the academic program. For them the total school experience was something less than satisfactory.

TABLE II

1980 Coop Graduate Follow-Up

Question No.	Items		CAP*		DO**		OTHER***	
			Female	Male	Female	Male	Female	Male
7.	Comparing your age and your background with others, do you consider your salary as	ABOVE AVE	13%	32%	8%	27%	13%	33%
		AVERAGE	80%	55%	77%	58%	55%	52%
		UNDER AVE	0%	5%	15%	8%	21%	12%
8.	How many weeks after graduation from high did you obtain your first full-time position?	0-2 WEEKS	60%	73%	46%	69%	40%	75%
		3-5 WEEKS	0%	9%	23%	8%	13%	4%
		6-8 WEEKS	7%	0%	0%	4%	3%	7%
		9-11 WEEKS	13%	0%	0%	0%	13%	0%
		OVER 12 WKS	0%	9%	15%	0%	18%	8%
		NEVER	7%	5%	8%	8%	8%	3%
9.	How many full-time positions have you had since graduating from high school?	ONE	73%	59%	69%	69%	66%	60%
		TWO	7%	23%	23%	15%	21%	25%
		THREE	0%	9%	0%	0%	0%	8%
		FOUR	0%	0%	0%	0%	0%	1%
		MORE	0%	0%	0%	0%	0%	1%
10A.	How satisfied are you with your high school academic program?	VERY SAT	7%	14%	31%	12%	8%	9%
		SATISFIED	66%	73%	46%	73%	63%	57%
		DISSATISFIED	20%	5%	8%	12%	16%	14%
		VERY DISSAT	7%	5%	8%	0%	5%	14%
10B.	How satisfied are you with your vocational prof program?	VERY SAT	13%	41%	54%	58%	37%	43%
		SATISFIED	67%	50%	38%	27%	50%	43%
		DISSATISFIED	13%	5%	0%	4%	3%	5%
		VERY DISSAT	0%	0%	8%	0%	3%	0%

* - Capstone
** - Diversified Occupations
*** - Others (Those not checking Diversified Occupations or Capstone)

11. Would you recommend that your best friend or relative enroll in a cooperative education program? Yes _____ No _____

The response rate to this question tends to reflect satisfaction with the program and employment satisfaction. The vast majority would recommend their programs to close friends or relatives as shown in Table 7.

12. The cooperative education program helped me financially to remain in school and graduate. Yes _____ No _____

Although this question was not designed to reflect potential drop-outs, it indicates that 49 percent of the student population felt strongly that the money they received in the cooperative vocational education program assisted them in remaining school. This does not suggest that they would have left school, but it could reflect financial and personal problems which could have effected grades and graduation.

13. I would have dropped out of school if a co-op program were not available. Yes _____, No _____

This question was asked to determine if students would have dropped out of school if it were not for the cooperative vocational education program. Eight of the d.o. females would have dropped out of school if they had not been involved in the co-op program, but none of the female students enrolled in capstone reported ever having the desire to leave school. Approximately 10 percent of the student population involved in this program, or 20 students of the group responding, would not have completed high school if it had not been for the cooperative vocational education program.

14. Have you ever sought help in obtaining a position from the State Employment Office? Yes _____ No _____

The results of this question were interesting. When checking with the employment office very few of them indicated that any one with a cooperative vocational education background needed assistance in findings jobs. Of course

people are not identified as having cooperative vocational education backgrounds and thus records may not be up-to-date. Again, we are uncertain if this response was for present positions or if they had contacted the employment office prior to entering a cooperative vocational education program for previous job seeking activities. Again, this is speculation. Yet it does suggest that only a relatively small number of people have sought help from the state employment office.

An additional question requested that students add any comment that would help us better understand feelings about the cooperative vocational education program. The comments were few, and for the most part, very positive concerning the cooperative vocational education approach. Those who had considered leaving school were very supportive. Occasionally, a criticism of the teacher or cooperative vocational education coordinator was given. In general, comments were limited.

Guidance Counselors Survey

In the previous year's evaluation of the six county-wide cooperative vocational education programs, the guidance counselors were surveyed. Twenty-five guidance counselors were identified as having contact with the cooperative vocational education students at either the sending school or through the cooperative vocational education program at the area vocational-technical school. All were contacted and found willing to participate in this study. The same questionnaire used a year earlier was utilized. However, an additional question concerning whether or not the cooperative vocational education program had improved this year over the last was added. All other questions remained the same. The purpose of this question was to determine the effects of the cooperative vocational education program in terms of school dropout rates and other economic benefits to students and/or the school.

1. The cooperative education program has improved this year over last year.
   Yes _____ No _____ Remained the same _____

Sixty percent of the guidance counselors felt that the cooperative vocational education program had improved. Twenty-eight percent felt that it had maintained the same degree of satisfaction, while 12 percent felt that it had not improved but in fact declined over the period of a year. The findings suggest that they were (see Table 3). The guidance counselors felt that it had a positive effect upon the dropout problem; 32 percent felt that it had decreased the student behavior problem, and 80 percent felt that the attitude of the students toward school had changed positively. According to 80 percent of the guidance counselors school attendance was moderately or highly effected, 96 percent felt that the cooperative program had either a moderate or high effect upon school grades. As in the previous year, about one-third of the guidance counselors would not place a student with behavioral problems in a cooperative vocational education program and would place only highly motivated and interested students in this program; while two-thirds would do the opposite depending upon the situation. One hundred percent of the guidance people felt that the cooperative program was at least a fair or excellent program. Question 10 asked that if the program was effectively coordinated; only four percent felt that it was not effectively coordinated. Thirteen percent of the same guidance counselors felt that the co-op program was not effectively coordinated, which suggests improvement between the two years.

Students

The students enrolled in the 79-80 school year cooperative vocational education program were surveyed to determine their attitudes toward cooperative vocational education and to determine what effect this coordinated effort may

TABLE III

1980 Guidance Counselors

n = 25

1. Co-op program has improved this year over last year:	YES	60%	NO	12%	SAME	28%		
2. Co-op effect drop out problem	YES	56%	NO	28%	SAME	16%		
3. Co-op effect student behavior problem	INCREASE	8%	DECREASE	32%	NO CHANGE	60%		
4. Attitude toward school	CHANGE POS.	80%	CHANGE NEG.	4%	NO CHANGE	16%		
5. School attendance	HIGHLY EF.	44%	MOD. EF.	36%	NEG. EF.	4%	NO EF.	16%
6. Positive effect on grades	HIGH	4%	MOD. "	92%	NO	4%	NEG.	0%
7. Would you recommend students behavior problem?	YES	40%	NO	32%	DEPENDS	28%		
8. Would you recommend only highly motivated and interested student?	YES	40%	NO	36%	DEPENDS	24%		
9. How do you feel about the co-op concept?	EXCELLENT	80%	FAIR	20%	POOR	0%	UNREALISTIC	0%
10. Do you feel the co-op program in your school is effectively coordinated?	HIGHLY	56%	MOD.	40%	NOT	4%		

have had upon their future decisions. The first three questions listed on the questionnaire were for demographic information and to verify their standing as capstone or DO students (see Table 4).

4. I like the cooperative education program. Yes _____ No _____

   All but one of the students in the cooperative vocational education program liked the program.

5. The wage I receive for my co-op job is: Good _____, Acceptable _____, Low _____, Too low _____

   More males felt their wages were lower than females, yet between 80 and 90 percent of both male and female felt their wages for the training period were either acceptable or good.

6. I am training in the area of my choice. Yes _____ No _____

   The vast majority of capstone students and DO students trained in the area of their choice. In the capstone setting, males more so than females, yet the trend was reversed in the diversified occupations program. Generally there were fewer DO program students training in the area of their first choice than the capstone students.

7. My intention is to follow this trade after graduation. Yes _____ No _____

   This questions was asked to determine if students were taking cooperative vocational education as an excuse to get out of school or if their career choice was realistic. Again the capstone was the most positive response. In the diversified occupations program, less than 50 percent of the people intended to follow the trade in which they were training, suggesting that many of these students may be in the program as an excuse to get out of school.

8. My grades are higher this year than last. Yes _____ No _____ The same _____

The grades tended to be higher this year than in the previous year. There were only a few occasions in which they were lower (see Table 4).

9. I like the co-op education program because of: (Check as many as appropriate)
Earning money _____, Good training _____, Getting away from school ____,
Work _____, Learning more from co-op _____, Other (specify) _____

In looking at the answers to this question, and the answers to question 7, one quickly determines that the interest of many students is to get away from school. At first, this may appear to be a bad connotation on cooperative vocational education, but it is lessening the dropout rate and helping students to stay in school. This lowers school related problems, and improves attendance; perhaps it is an excellent opportunity for students who are somewhat disinterested in the total school activity. In looking at the placement of the graduates it does suggest that perhaps many of these people find themselves during this transition period. Earning money seems to be the major category where the majority of students liked their cooperative vocational education program.

10. The related theory class is valuable to me. (Check one)
Very much _____, Some _____, Very little _____, Not at all _____.

This question was asked to determine if the related theory class was useful to students. The capstone student saw less value than the diversified occupations student. The capstone students met once every other week and the DO students met an average of 50 minutes per day; one of the school systems was not meeting this requirement.

11. I would like to work for my present employer after graduation.
Yes _____ No _____

The majority of students would like to work for their present employer. This suggests they are not only pleased with the salary and training but liked the environment and the job as well.

TABLE IV

1980 Student Survey

N=193

Question No.	Items		CAP Female	CAP Male	DO Female	DO Male	TOTAL
			Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
4.	I like the co-op program		99% / 1%	99% / 0%	100% / 0%	100% / 0%	99.3% / 0.4%
6.	I am trained in the area of my choice.		81% / 19%	90% / 7%	80% / 20%	64% / 34%	80.6% / 18%
7.	I intend to follow this trade after graduation		73% / 26%	83% / 14%	43% / 57%	50% / 45%	68.1% / 28.9%
12.	School vocational training up-to-date in job		80% / 19%	81% / 19%	87% / 10%	69% / 30%	78.4% / 20.5%
13.	Recommend co-op program for friends relatives		94% / 6%	98% / 2%	93% / 7%	91% / 8%	94.9% / 4.8%
14.	Dropout of school if no co-op program		10% / 89%	10% / 90%	13% / 87%	14% / 86%	11.4% / 88.3%
5.	The wage I receive for my co-op job is:	GOOD	47%	41%	40%	47%	44%
		ACCEPTABLE	47%	40%	60%	45%	45%
		LOW	0%	14%	0%	3%	6%
		TOO LOW	4%	2%	0%	5%	3%
8.	My grade higher this year than last year	YES	29%	60%	43%	53%	48.4%
		NO	14%	5%	0%	8%	7.3%
		THE SAME	57%	35%	57%	39%	44.3%
9.	I like the co-op program because of:	EARNING MONEY	78%	88%	83%	86%	84.6%
		GOOD TRAINING	60%	72%	27%	50%	58.6%
		AWAY FROM SCHL	39%	43%	56%	53%	45.8%
		WORK	47%	49%	40%	42%	45.8%
		LEARNING MORE	30%	49%	13%	33%	36.3%
		OTHER	6%	4%	3%	9%	5.5%
10.	The related theory class valuable to me	VERY MUCH	17%	21%	33%	25%	22.3%
		SOME	68%	56%	60%	45%	57.1%
		VERY LITTLE	9%	12%	7%	14%	11%
		NOT AT ALL	6%	9%	0%	11%	7.7%
11.	I would like to work for my present employer after graduation	YES	63%	69%	57%	56%	63%
		NO	33%	27%	33%	39%	32%
		NOT SURE	4%	2%	10%	5%	4%
15.	The worst thing in my co-op program:	TRANSPORTATION	20%	12%	7%	6%	12.1%
		WORKING HOURS	13%	8%	10%	11%	10.3%
		PRESSURE FROM WORK	9%	10%	10%	6%	8.8%
		NOT TIME FOR EXTRA CURRICULAR ACTIVS	30%	24%	27%	33%	27.8%
		OTHER	6%	10%	0%	9%	7.7%
17.	Comment made	NO COMMENT	73%	69%	80%	84%	74.7%
		COMMENTS	27%	31%	20%	16%	25.3%

12. My inschool vocational training was up-to-date with that needed in my job. Yes _____ No _____

This question was geared more to the capstone student than the diversified occupations student but interestingly enough, more of the DO females felt that inschool preparation was better than what the capstone female student felt they received. There is very little inschool preparation for most DO programs, so this finding is most interesting.

13. I would recommend my best friend or relative enroll in the co-op education program. Yes _____ No _____

Response to this question tends to provide the same type of information we received from the graduates. Generally, students like the program and would recommend it to other students.

14. I would have dropped out of school if there had been no cooperative education program. Yes _____ No _____

More DO students would have dropped out of school if the cooperative vocational education program were not available. The results of the same question asked of graduates, as well as those presently enrolled in the program, are about the same. Approximately 10 percent of the student body would have dropped out if they had not been involved in the cooperative vocational education program. This represents between 35 and 40 students. If the information suggesting people graduating from high school have lower life time earnings, and a tendency to be in difficulty, or incarcerated enhance because of not having a high school diploma, this approach would have an enormous effect upon the individual's income and society's overall costs for upkeep of those non-graduates.

15. The worst thing in my co-op program is: (Check one only)
Transportation _____, Working hours _____, Pressure from work _____,
No time for extra-curricular activities _____, Other (specify) _____

The transportation problem is consistent throughout studies made in the past and is still a major problem. Interestingly enough is the fact that students feel they do not have time for extra-curricular activities. Nearly one-third of the students had this feeling; perhaps more emphasis should be put into student organizations for capstone and DO students so they can become involved in extra-curricular activities.

Other Comments: _____

Relatively few people choose to comment. The comments were favorable to co-op education programs, with an occasional specific problem with a teacher, employer, or coordinator being reported.

Employer

Employers were visited at their place of business and were randomly selected from the total list given to researchers by the respective coordinators of the county-wide programs. It was a stratified random sampling of employers who had diversified program students, capstone students, and those who had a combination of both. The employers were asked if co-op students were adequately prepared for the position they had taken. Seventy-seven percent employers stated yes, 15 percent said no, and eight percent said it was not applicable because there was no inschool preparation for their trade area. In rating the cooperative vocational education program it should be mentioned that the co-op coordinators were not present during this interview period, thus the employers felt free to discuss any feelings or problems they may have had with the program or the coordinator. Twenty-three percent of the employers gave the school an excellent

rating (see Table 5), 77 percent rated it good; none rated it fair, poor or bad. One hundred percent stated they would be willing to take additional students in the future. When asked if the students' fellow workers supported the co-op student, 100 percent again gave an affirmative answer. One hundred percent of the employers felt there were no problem with unions because of the co-op students in their employ. They either had no unions or had worked out an arrangement so that this was not going to be a problem for the union or for the employer. One hundred percent of the employers felt that the cooperative vocational education program was beneficial to them, as well as to the student.

In the next series of questions we are dealing with the training plan of cooperative vocational education. Seventy-seven percent of the employers stated they had a training plan, 23 percent said they did not. When asked who developed it, 23 percent of the employers stated they themselves had, and 46 percent stated the company had a training plan they followed. None stated that the coordinators helped develop a plan and 77 percent stated another source such as an association training plan, or a plan worked out between them and the student.

Questions were asked of the employer concerning the coordinators visit, and if it was adequate in terms of supervising the student. Eighty-four percent stated they would like to keep it as it was and that it was adequate for their needs. One of the employers felt that they would like to see the coordinator more often and an additional one stated it made little or no difference. In asking them how they became involved in a cooperative education program, 60 percent stated the coordinator had visited them and explained the program to them. Fifteen percent stated they were approached first by students, 53 percent listed other sources such as newspaper, friends, relatives, and other employeees.

TABLE V

1980 Employers Survey (N=13)

Question No.	Items	YES	NO
6.	Would you have hired a regular part-time worker if a coop student had not been available?	46%	54%
7.	Would you like to take more coop students in the future?	100%	0%
8.	Do other employees support and assist the student-learners?	100%	0%
9.	Do you have any problems with the Union because of student-learners?	0%	92%
10.	Is the coop program beneficial to you?	100%	0%
13A.	Do you employ students you trained after their graduation?	92%	8%
B.	How about the student this year?	83%	17%
18.	Was the coop student adequately prepared for this position?	100%	0%
14A.	Do you have a training plan for this student?	77%	23%
B.	It was developed by	YOU 30% COMPANY 60% COORDINATOR 0% OTHER 10%	
11.	How did you become involved in this coop program?	STUDENT 15% COORDINATOR 62% EMPLOYEES 0% OTHER 23%	
12.	What was your procedure in hiring coop students?	INTERVIEW 100% SCHL SELECT 0% OTHER 0%	
15.	Would you like the teacher-coordinator to visit	MORE 17% LESS 0% SAME 83%	
16.	Over all, rating for the coop program is	EXCELLENT 23% GOOD 69% FAIR 8% POOR 0%	

2. How long have you been associated with this coop program(3.22* years.)

3. The approximate number of student-learners you have had since becoming involved(5* student-learners.)

4. How many student-learners do you have this year? (2.08* student-learners.)

5. How many full-time employees do you have? (107.17* employees.)

* Mean Value

Concerning the process used for hiring students, 100 percent of the employers stated they interviewed the student, and selected the one they felt best fit the situation. One hundred percent of the employers stated that they normally hired students after graduation, however when asked about this particular year's student, only 77 percent felt that they would hire, while 15 percent stated they would not. The major reason for not hiring was because there were no openings and the second reason was because hiring was done through an outside agency. In asking these 13 employers if they would have hired a part-time employee if the co-op student had not been available, 7 or 53.8 percent stated no. Six or 46.2 percent stated yes. Again, this points out the fact that cooperative vocational education programs does a lot in job development and that employers invest in cooperative vocational education students for future benefit rather current need. Demographic information gathered from the employers found that the average employer contacted had been in the program for approximately three or four years and had 6.6 students and an average of a little more than two students in the present year. A direct question on the effects of a single coordinator visiting the co-op program rather than one coordinator for each type of program, was addressed to the employers. In each case, where the employer had more than one type of student they felt strongly about having only one person visit them and only dealing with the school through one individual. In most cases, they felt it was impossible to have more than one coordinator. In two cases, in the past, they had several different coordinators who liked this process better. One employer, with students from two different counties, eliminated students from the non-coordinated county because so many people coming to visit them concerning different students that it was difficult to keep records. It was felt that this approach was more trouble than it was worth.

From the employer's point of view, the coordinated effort seems to work better and there is less hassle by the coordinator's approach rather than by the individual project approach. Three of the 13 employers had both capstone, DE, and diversified occupations students enrolled in sales. They saw no difference between the two groups and paid both the same. This may be an isolated case but if not this could represent future problems in distributive education.

Summary, Conclusions and Recommendations

Employers, students, graduates, and guidance counselors were surveyed in the three counties, Schuylkill, Clearfield, and Fulton. These counties represent three programs that have committed themselves to a county-wide coordinated effort for cooperative vocational education. The purpose of this project was to assess the effectiveness of this coordinated effort. Ten months following graduation, 67 percent of the graduates had full-time employment, with 10 percent part-time. Seventy-seven percent of those working, were working in the area for which they had trained. Forty-seven percent were working for the same employer with which they had trained, 66 percent were satisfied with their present employment positions and 94 percent stated the program helped them get along with their co-workers, customers, and other people with whom they come in daily contact. They felt the present salary was average or better than average, yet the female respondents tended to lower this average. Sixty-four percent of the graduates acquired their jobs two weeks following graduation. Nine percent of the population is presently unemployed. Comparing these figures with the VEMIS report and state employment outlook reports, the nine percent unemployment rate compares favorably with the youth unemployment in the three counties which is in excess of 22 percent. Seventy-seven percent of the students

employed in the area for which they trained is nearly a 200 percent increase over the average vocational student as per the VEMIS report, suggesting that it is something between 30 and 35 percent.

The students were surveyed after completing seven months of their cooperative vocational education program, 99.4 percent stated they liked the cooperative education program, 89 percent felt the wages they received while training were good, while less than 10 percent felt they were too low. Eighty-two percent were training in the areas of their first choice, while 17 percent were not. Seventy-one percent intended to follow their specific trade following graduation; 86 percent stated their reason for choosing cooperative education was to earn money, 51 percent stated it was for the training, and 54 percent said it was to get out of school. Eighty percent felt the co-op theory class helped them deal with the transition from school to work, 65 percent felt they would like to work for their present employer, and 80 percent felt that the vocational training they received in school was current compared to the activities that are required on the job. Twenty percent felt that it was not. The majority of students felt that the coordinator visited them every other week, every third week, or once a month.

Guidance counselors generally favored the cooperative education program and felt that it lowered dropout rates, increased grade point averages, lowered school vandalism or disruptions, improved attendance. Sixty percent felt that the cooperative vocational education program under this coordinated effort had improved over the past year. This was the second year of the coordinated effort. Generally, the employers were very favorable toward the cooperative vocational education program. They all intended to continue in a cooperative vocational education program and felt that it was beneficial to both student and themselves.

Seventy-seven percent stated they would attempt to hire the student they had this past year. Seventy-seven percent stated they were following a training plan. Eighty-four percent felt that the coordinator's visits were adequate and ample. One person suggested that he would like to see the coordinator more often, 77 percent felt the students were adequately prepared for entering their position. All the employers rated cooperative vocational education as good or excellent.

Conclusions

Objective one of the overall objectives of the project was to evaluate the second year, county-wide coordinated cooperative education program funded by the Research Coordinating Unit in Clearfield, Fulton, and Schuylkill counties. The conclusions can be drawn that these programs were operating effectively and efficiently, and had improved over the previous year. Their record from the students, graduates, guidance counselors and employers' point of view were of the highest quality. Although there were differences in the coordinated effort and the degree in which chief school administrators, coordinators, guidance counselors, teachers and students felt about the cooperative vocational education program, it could be generally concluded that the program was well coordinated and had improved over the year.

The second objective was to determine the effects of high youth unemployment and school dropout rates in these coordinated areas. The results of graduates and present students indicated that it had a major effect upon eliminating or lowering the school dropout rate. Ten to 12 percent of the students indicated that if it had not been for the cooperative education program they would have dropped out of school. The unemployment rate of this group was far less than the overall unemployment rate when compared to the overall youth unemployment rate for each of the counties. The placement rate in areas for which students

trained was extremely impressive; at least twice that of the VEMIS report for all vocational students throughout the state of Pennsylvania. It can be concluded that the cooperative vocational education program has in fact lowered the youth unemployment and high school dropout rates in their respective counties.

A second sub-objective was to sample students' attitudes toward the second year of the cooperative vocational education program concerning placement, on-the-job supervision, theory class and extracurricular activities. It can be concluded that students' attitudes toward on-the-job supervision, theory class, and placement appeared to be positive. There is some concern by the students over their inability to become involved in extracurricular activities. One-third of the students stated this was a particular problem for them.

A third sub-objective was to sample employer reaction toward the consolidated effort to determine if the effectiveness in eliminating duplication would encourage greater participation by employers in the cooperative education program. The employers' responses left little doubt that they wanted a more coordinated effort; they did not want to see several coordinators, and strongly felt that dealing with one individual provided better opportunity to be served and to serve the students. It can be concluded that the coordinated county-wide cooperative vocational education program had many positive effects upon improving the relationship between employer and the school, thus enhancing the employability of more students.

The final sub-objective was to determine how well the individually funded project was meeting this stated objective. Although there were many problems for each of the coordinated efforts, one coordinator resigned in the middle of the year, thereby creating a major problem. One of the school district's chief school administrators was less than enthusiastic about the county-wide coordinated effort, and this tended to dampen the overall results of this study. There

were problems in each of the three county-wide systems in meeting the minimum minute requirements for their related theory class. Two of the three counties were doing an excellent job in attempting to meet these requirements; the third was considering alternatives in order to meet their commitment. Program philosophies and directions differed somewhat, but all tended to be working toward reaching their stated objectives. It can be concluded that stated objectives in each of the three county-wide coordinated programs were being met.

Recommendations

1. Expand the county-wide concept to eliminate wasted effort and duplication and to maximize employment opportunities for all youth.

2. A further follow-up be made on the area of sex equality to determine summations to the possible causes for the female's feelings of lower wages than their male counterparts in the cooperative vocational education program.

3. Expand the cooperative vocational education approach to include more of the vocational students as well as to expand to include more students in diversified occupations.

4. Encourage guidance counselors to place potential dropouts into the cooperative vocational education program.

5. Have the cooperative vocational education coordinators continue to work toward finding and placing students in the areas of their choice and interest, and not be as concerned with numbers but more concerned with quality of the program.

6. Conduct further research on those students who enter the cooperative vocational education program who "just get out of school," to determine how they can best be served and directed into more useful and productive activities for their future benefit.

7. Explore ways to maximize the job development process that the cooperative vocational education coordinators are involved with and still further lower the youth unemployment in the respective labor market areas.

8. Conduct research on the effects of CETA legislation and targeted tax credit legislation on cooperative vocational education student placement and future employment opportunities.

Implications to Education

There seems little doubt that the cooperative vocational education approach has had a positive effect on lessening the school dropout rate in the secondary programs in the counties surveyed. The general consensus appears to be that youth unemployment was positively effected by the CVE approach. Cost benefit ratio favored the cooperative vocational education program from student, employer, parent, and school point of view. Students improved their grades and attendance, and had less school related problems, while at the same time earning money with some of it going toward their educational expenses. Parents approved of their childrens' program and it was less costly. The employers not only developed trained employees, but in less time and at a lower cost. School officials found this method to be the least expensive of any alternatives that had been considered and, through time, feel it will lower the costs due to the lessening of needed elective area teachers. The results strongly suggests that the benefits of cooperative vocational education outweigh their cost. The results of this study suggest that the CVE approach assist students not only in the transition from school to work, but perhaps more fundamentally, the transition from adolescence to young adulthood.

These studies point out that the cooperative vocational education coordinator is a job developer with 34 percent of all training situations created especially for the co-op student. The school takes on a new and much needed role in the community. It raises a broader question that perhaps the school might be in a better position to expand the world of work potential of youth, even more, and at a reduced cost to employers, students and parents. From the placement records of the graduates in the three counties surveyed, it was determined that 47 percent were with the employer with whom they trained; 77 percent were

employed in the area in which they trained; this is impressive. This compares with the placement rate of all vocational students in Pennsylvania being 25 percent, while this is over a 200 percent increase. For those students who did not stay in the trade in which they trained, they have, while still in school, developed a work reputation which will assist them in gaining other employment.

In the diversified occupation approach, the vocational curriculum offering is limited only to the types of employment opportunities available in the community. These training opportunities tend to lead to employment, thus lessening the possibility of training people for non-existent jobs. Though the cooperative education program has gone through rapid expansion, this program is still well under-utilized. If it were more fully utilized, it could have a marked effect upon youth unemployment.

APPENDICES

THE PENNSYLVANIA STATE UNIVERSITY
COLLEGE OF EDUCATION
Division of Occupational and Vocational Studies
RACKLEY BUILDING
UNIVERSITY PARK, PENNSYLVANIA 16802

March 31, 1980

Dear Home and School Guidance Counselor:

As we approach the end of the second year of the cooperative education program in your school district, we are asking you once again to provide feedback concerning the effectiveness of this program. This will serve as an opportunity for us to make recommendations to other cooperative education programs to follow the examples set by the counties of Clearfield, Fulton, and Schuylkill.

We are attempting to make a comparison between the responses that were received last year and the responses that you will provide us by answering the enclosed questionnaire. Your response will be kept anonymous. A self-addressed, return envelope has been enclosed for your convenience.

Sincerely,

Frederick G. Welch
Project Director

FGW/rzm

Enclosures

COOP GRADUATE FOLLOW-UP

Male _____ Female _____ DO Program _____ Capstone _____

PLEASE CHECK ONLY ONE

You are now:
A. employed full-time _____
B. employed part-time _____
C. in the military service _____
D. unemployed, seeking employment _____
E. unemployed, not seeking employment _____
F. in college _____
G. advanced training (not college) _____

If you have worked or are working (part-time or full-time), please answer the following questions:

1. Do (did) you work in the area related to the training you received while enrolled in the cooperative educational program? Yes _____ No _____

2. Do you work for the same employer as when you were enrolled in the cooperative education program? Yes _____ No _____

3. Are you satisfied with your position? Yes _____ No _____

4. If you were to repeat high school, would you choose the cooperative education program? Yes _____ No _____

5. Did the cooperative education program help improve your ability to get along with your co-workers, customers, and/or other people? Yes _____ No _____

6. Did you school assist you in finding a position after graduation? Yes _____ No _____

7. When comparing your age and background with others, do you consider your salary as: above average _____, average _____, lower than average _____

8. How many weeks after graduation from high school did you obtain your first full-time position? 0-2 weeks _____, 3-5 weeks _____, 6-8 weeks _____, 9-11 weeks _____, over 12 weeks _____, never looked for a position _____.

9. How many full-time positions have you had since graduating from high school?
1 _____, 2 _____, 3 _____, 4 _____, more than 4 _____

10. How satisfied are you with your high school academic program?
very satisfied ____, satisfied ____, not satisfied ____, very dissatisfied ____
How satisfied are you with your vocational program?
very satisfied ____, satisfied ____, not satisfied ____, very dissatisfied ____

11. Would you recommend that your best friend or relative enroll in a cooperative education program? Yes _____ No _____

(OVER)

COOP GRADUATE FOLLOW-UP - continued

12. The cooperative education program helped me financially to remain in school and graduate. Yes _____ No _____

13. I would have dropped out of school if a coop program were not available. Yes _____ No _____

14. Have you ever sought help in obtaining a position from the State Employment Office? Yes _____ No _____

15. Please add any comments that would help us to better understand your feelings about your high school cooperative education program.

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THE PENNSYLVANIA STATE UNIVERSITY

DIVISION OF OCCUPATIONAL AND VOCATIONAL STUDIES

1. The cooperative education program has improved this year over last year.

   _____Yes _____ No _____ Remained the same

2. Do you feel that this year's cooperative education program in your school district has effected the drop-out problem?

   _____Yes _____ No _____ Remained the same

3. Has this year's cooperative education had any effect on student behavior problems in your school district?

   _____ % increase _____ % decrease _____ no change

4. Do you think that a student's overall attitude toward school is effected by involvement in cooperative education?

   _____ change positively _____ change negatively _____ no change

5. Do you feel that a student's school attendance is positively effected by an involvement in cooperative education?

   _____ highly effected _____ moderately effected _____ no effect _____ negatively effected

6. Do you feel that a student's involvement in cooperative education has a positive effect on his/her overall grades?

   _____ high effect _____ moderate effect _____ no effect _____ negative effect

7. Would you recommend placing a student with a behavior problem in a cooperative education program? _____ Yes _____ No

8. Would you recommend that only highly motivated or interested students be placed in cooperative education programs? _____ Yes _____ No

9. How do you feel about the overall concept of cooperative education?

   _____ excellent idea _____ fair idea _____ poor idea _____ unrealistic idea

10. Do you feel that the cooperative education program in your school district this year is effectively coordinated?

    _____ highly effective _____ moderately effective _____ not effective

11. Comment on any data that you feel would assist us in determining the overall effectiveness of cooperative education:

    _____

    _____

    _____

(Use reverse side of this form for additional comments)

STUDENT SURVEY

Please Check

1. Male _____ Female _____

2. Capstone _____ DO _____

3. My trade area is (e.g., electronics, food service) _____

4. I like the cooperative education program. Yes _____ No _____

5. The wage I receive for my coop job is: Good _____ Acceptable _____

   Low _____ Too low _____

6. I am training in the area of my choice. Yes _____ No _____

7. My intention is to follow this trade after graduation. Yes _____ No _____

8. My grades are higher this year than last. Yes _____ No _____ The same _____

9. I like the coop education program because of: (Check as many as appropriate)

   Earning money _____ Good training _____ Getting away from school _____
   Work _____ Learning more from coop _____ Other (specify) _____

10. The related theory class is valuable to me. (Check one)

    Very much _____ Some _____ Very little _____ Not at all _____

11. I would like to work for my present employer after graduation. Yes _____ No _____

12. My inschool vocational training was up-to-date with that needed in my job. Yes _____ No _____

13. I would recommend my best friend or relative enroll in the coop education program. Yes _____ No _____

14. I would have dropped out of school if there had been no cooperative education program. Yes _____ No _____

15. The worst thing in my coop program is: (Check one only)

    Transportation _____ Working hours _____ Pressure from work _____
    No time for extra-curricular activities _____ Other (specify) _____

16. My coop instructor vists me on an average of once every _____ weeks.

17. Other comments: _____

_____

_____

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF EDUCATION
BOX 911, HARRISBURG, PA. 17126

October 6, 1979

Mr. Fred Welch
Pennsylvania State University
103 Rackley Building
University Park, PA 16802

Dear Fred:

This letter is to confirm the meeting that will be held at The Pennsylvania State University, 103 Rackley Building, on Thursday, November 1, 1979 at 10:00 a.m. for the coordinated co-op projects.

The agenda for the meeting will be:

10:00 a.m. - 11:00 a.m.	Fulton, Clearfield and Schuylkill Project Summaries
11:00 a.m. - 12 Noon	Third Party Evaluation Plan and Results of Last Year's Evaluation
12 Noon - 1:00 p.m.	Lunch
1:00 p.m. - 1:30 p.m.	Problems and Concerns
1:30 p.m. - 2:00 p.m.	Plans for Presentation at PVA Conference in June
2:00 p.m. - 2:15 p.m.	Plans for Future Meetings

If you have any questions about the meeting, please contact me at (717) 787-4865.

Sincerely yours,

James P. Lewis
Research Associate
Research Coordinating Unit

cc: Mr. William Reilly

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF EDUCATION
BOX 911, HARRISBURG, PA. 17126

December 17, 1979

Dr. Frederick G. Welch
Professor-in-Charge
Program of Vocational-
Industrial Education
The Pennsylvania State University
103 Rackley Building
University Park, PA 16802

Dear Dr. Welch:

This letter is to confirm the meeting that will be held at the Nittany Lion Inn, The Pennsylvania State University, on Thursday, January 24, 1980 at 10:00 a.m. for the three coordinated co-op projects. All project staff are invited to attend.

The agenda for the meeting will be:

10:00 a.m. - 10:30 a.m.	Second Year Self-Evaluation Report - PDE Staff
10:30 a.m. - 11:00 a.m.	Presentations for Co-op Workshops, April 8-9 and April 14-15 - PDE Staff
11:00 a.m. - 12:00 noon	Summary Update of Each Project - Project Staff
12:00 noon - 1:00 p.m.	Lunch
1:00 p.m. - 1:30 p.m.	Update of Third-Party Evaluation - Dr. Welch
1:30 p.m. - 2:00 p.m.	Wrap-Up and Plans for Future Meetings - PDE Staff

If you have any questions about the meeting, please contact me at (717) 787-4865.

Sincerely,

James P. Lewis

James P. Lewis
Research Associate
Research Coordinating Unit

JPL/dlr

cc: Mr. William Reilly